

AD-A217 255

AIR WAR COLLEGE

RESEARCH REPORT

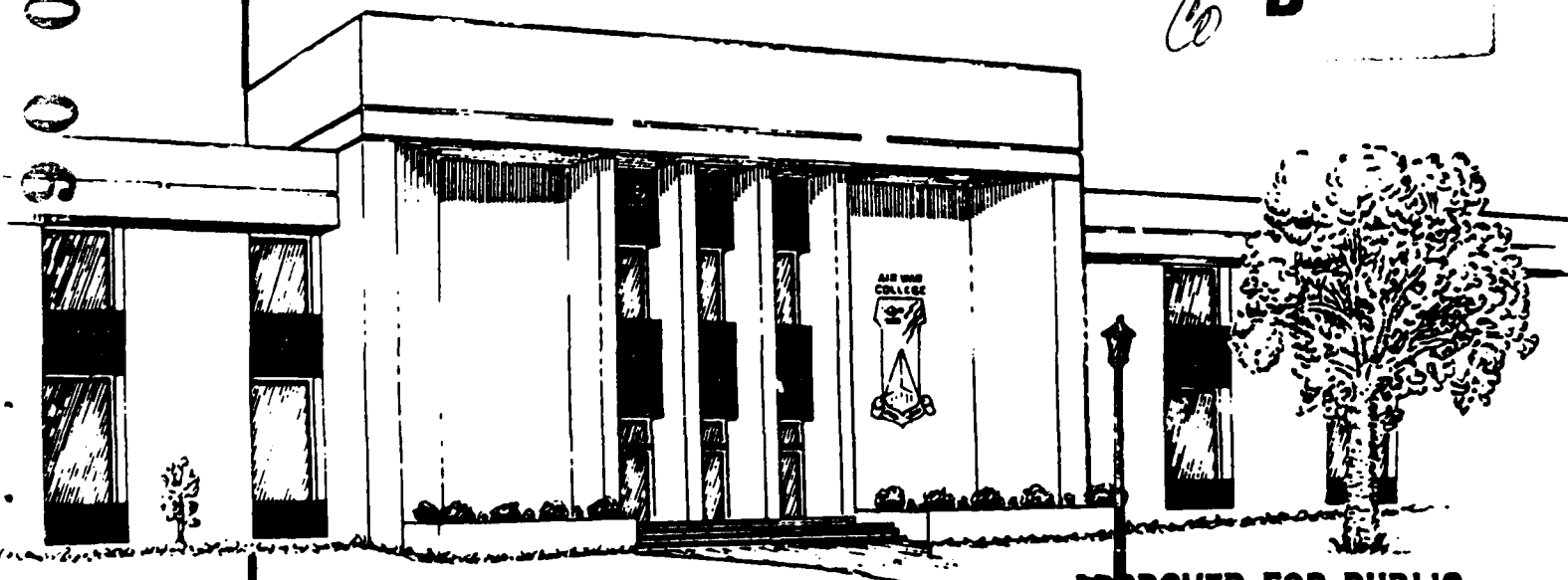
AN ANALYSIS OF THE IRAN-IRAQ WAR:
MILITARY STRATEGY AND POLITICAL OBJECTIVES

COLONEL MAEDH AYED AL-LIHAIBI

ROYAL SAUDI AIR FORCE

1989

DTIC
S ELECTE D
FEB 01 1990
B



AIR UNIVERSITY
UNITED STATES AIR FORCE
MAXWELL AIR FORCE BASE, ALABAMA

APPROVED FOR PUBLIC
RELEASE; DISTRIBUTION
UNLIMITED

90 01 31 146

AIR WAR COLLEGE
AIR UNIVERSITY

AN ANALYSIS OF THE IRAN-IRAQ WAR:
MILITARY STRATEGY AND POLITICAL OBJECTIVES

by

Maedh Ayed Al-Lihaibi
Colonel, Royal Saudi Air Force

A DEFENSE ANALYTICAL STUDY SUBMITTED TO THE FACULTY
IN
FULFILLMENT OF THE CURRICULUM
REQUIREMENT

Advisor: Colonel William Lofgren

MAXWELL AIR FORCE BASE, ALABAMA

May 1989

DISCLAIMER

This study represents the views of the author and does not necessarily reflect the official opinion of any Saudian official, Ministry of Defense and Aviation (MODA), or any other Saudian department. Also it does not necessarily reflect the official opinion of the Air War College or the Department of the Air Force. In accordance with Air Force Regulation 110-8, it is not copyrighted but is the property of the US Government.

Loan copies of this document may be obtained through the interlibrary loan desk of Air University Library, Maxwell Air Force Base, Alabama 36112-5564 (Telephone: [205] 293-7223 or AUTOVON 875-7223).

EXECUTIVE SUMMARY

TITLE: An Analysis of the Iran-Iraq War: Military Strategy and Political Objectives

AUTHOR: Maedh Ayed Al-Lihaibi, Colonel, Royal Saudi Air Force

The Iran-Iraq War was one of the longest and the costliest wars of the Twentieth Century. This conflict did not begin only because of their historical and geographic differences. It also started due to deep ideological and political differences as well. This paper examines the political and the military objectives of both countries. It describes the four phases of the war, an analysis of the strategy and the tactics involved, and the weaponry used. Finally, it concludes with important military and political lessons learned. *Keywords: Foreign Wars, (KT)*



Accession For	
NTIS GRA&I	<input checked="checked" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By _____	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	

BIOGRAPHICAL SKETCH

Colonel Maedh Ayed Al-Lihaibi is a member of the Royal Saudi Air Force. He is a graduate of King Faisal Air Academy, in 1970, with a B.S. in Aerosciences. Colonel Lihaibi completed Air Command and Staff College at Maxwell Air Force Base in 1986. He has served as both operation and commanding officer of a fighter squadron. He is a graduate of the Air War College, Class of 1989 and has recently been appointed as commander of a flying wing.

TABLE OF CONTENTS

CHAPTER		PAGE
	DISCLAIMER.	i
	EXECUTIVE SUMMARY . . . . .	.ii
	BIOGRAPHICAL SKETCH	iii
	LIST OF TABLES.	v
	LIST OF MAPS. . . . .	.vi
I	INTRODUCTION.	1
II	HISTORICAL BACKGROUND	2
	Iran-Iraq Relations Before the War.	3
	The War and the Objectives.	4
	Comparative Force Strength.	5
III	PHASES OF THE WAR . . . . .	.17
	Phase 1: The Iraq Offensive	
	22 September 1980 - November 1980 . . . . .	.17
	Phase 2: Stalemate	
	17 November 1980 - 26 September 1981. . . . .	.18
	Phase 3: Iranian Counter Offensive	
	27 September 1981 - October 1983. . . . .	.18
	Phase 4: The Stalemate . . . . .	.19
IV	CONDUCT OF THE WAR. . . . .	.21
	The War at Sea. . . . .	.21
	The Tanker War. . . . .	.21
	The Air War . . . . .	.23
	Shift in Iraq Air Capabilities. . . . .	.24
	Chemical Warfare. . . . .	.26
	War of the Cities . . . . .	.26
V	ANALYSIS OF THE WAR . . . . .	.28
	Objectives and Strategy . . . . .	.28
VI	CONCLUSION. . . . .	.33
	BIBLIOGRAPHY. . . . .	.41

LIST OF TABLES

TABLE		PAGE
1	OPPOSING FORCES IRAN-IRAQ	6
2	. . . AND WHO'S GETTING HIT . . . . .	.22
3	IRAN-IRAQ ATTACKS . . . . .	.23

LIST OF MAPS

MAP		PAGE
1	IRAN-IRAQ The Theater of Conflict . . . . .	.36
2	SHATT AL ARAB AND ABADAN ISLAND . . . . .	.37
3	IRAN Approximate Territory Captured by Iraq November 1980 . . . . .	.38
4	IRAN Changes in the Front Line in Khuzestan Province. . . . .	.39
5	LARAK ISLAND IN THE MOUTH OF STRAIT OF HORMUZ . . . . .	.40

CHAPTER I

INTRODUCTION

The Iran-Iraq War, which lasted for almost eight years, was one of the costliest conflicts of the century with more than a million killed and a million wounded on both sides. The western public's attention was first aroused at the outbreak of the Iran-Iraq War; as it was assumed that the flow of oil would be endangered and the 1973 oil shock would be repeated.

The historic roots of today's problem go back to the era of the Persian and Ottoman Empires; when a peace and border agreement was signed between these two empires in 1639. But the 22 September 1980 war did not start only because of historical or geographic disputes. This war was largely ideological as well. The two countries fought very cruelly and bitterly. They targeted civilians and used chemical warfare. Both countries used everything available to survive and to avoid total defeat.

It is my intention in this paper to investigate the two countries' political objectives and their military strategies.

CHAPTER II

HISTORICAL BACKGROUND

The Iran-Iraq War has ancient historical roots. For over a thousand years, ethnic and territorial disputes between Semitic Arabs and Aryan Persians have periodically disturbed the peace in the Middle East.

The cultural difference that has separated the Arabs and Persians may be traced to at least the Seventh Century, when the victorious Arab armies extended Islam east of the Zagros Mountains. Persia, now Iran, has been the bastion of the Shiite branch of Islam while Iraq's political elites have oriented the country toward Suni Islam.

The first peace and border agreement was signed between the two nations in 1639, but the border disputes exploded again in 1818 and another agreement was signed in 1823. After Britain and Russia intervened in 1837, another border agreement was also signed.

In the Twentieth Century, the dispute centered around the Shatt Al Arab River. The river forms the border between Iraq and Iran for 55 miles until it empties into the Arabian Gulf. The Shatt and the region around it have strategic and economic importance for both countries, but particularly for Iraq since it is Iraq's principle maritime window to the world.

Iran-Iraq Relations Before the War

The Shah of Iran believed that Iraq and the Soviet Union were Iran's primary threats.^(2:6) In his effort to keep Iraqi forces occupied, the Shah encouraged a Kurdish rebellion within Iraq and supplied the rebels with aid and weapons. In November 1971, Iran occupied three islands belonging to United Arab Emirates (UAE). These islands lie at the entrance of the Strait of Hormuz. On 3 December 1971, Iraq broke its diplomatic relations with Iran; the beginning of 1972 witnessed several clashes of arms between the two states.^(1:14) The clashes escalated along the borders while the Kurd's activities increased in northern Iraq. When the Civil War expanded and threatened Iraq in 1975, Iraq's Saddam Hussein was forced to do something to stop it. Arab and international efforts were made to mediate the situation. Algiers played an active role in a settlement which resulted in the signing of the Algiers Agreement on March 1975 and set the border between the two countries as the Thalweg Line (the middle of the river channel). Saddam Hussein also expelled the Ayatollah Khomeini from Iraq to fulfill the Algiers accord.

After the Shah was deposed and Khomeini came to power in 1979 in an Islamic Revolution, Khomeini called on Iraqi Shiites to overthrow the Iraq Government. The Iraqis did not welcome the Islamic Revolution which Khomeini wanted to expand to include the Shiite holy cities in Iraq: Al Basra, Karbla, and Al Najaf.

On 24 December 1979, Iraq demanded a revision of the 1975 agreement and reactivating previous agreements of 1913 and 1937 concerning water and land borders. Iran rejected Iraq's demands and ordered the closure of the Strait of Hormuz. Iraq considered the closure of the Strait as a declaration of war by Iran against the Iraqi Government. The same day, the Iraqi Revolutionary Council ordered the Iraqi Armed Forces to invade Iran. (1:15)

The War and the Objectives

Iraq launched a preemptive strike against Iran on 22 September 1980. Baghdad stated its war objectives on 28 September 1980 which included that Iran:

1. Recognize Iraq's legitimate and sovereign rights over its land and water, particularly the Shatt Al-Arab.
2. Refrain from interfering in Iraq's internal affairs.
3. Adhere to the principle of good, neighborly relations.
4. Return to the (UAE) the Iranian occupied islands.

There were also unannounced Iraqi objectives, such as:

1. Iraq wished to be the dominant state in the Gulf area nationally, politically, and economically.
2. To secure its Baathist Government from Khomeini's stated intent to overthrow it.
3. To destroy Iranian military power while Iran was weakened by its revolution and cutoff from United States' (US) supplies and support.

4. To capture Khuzestan (with its Arab population) so that Iraq could present Iran's new leadership with a situation that would force a political settlement for the Shatt Al-Arab dispute favoring the Iraqis. (1:26)

Iranian war objectives were stated in September 1980 and demanded that Iraq:

1. End its aggression by unconditional withdrawal from all Iranian territory.
2. Acknowledge its war guilt and pay reparations.
3. Remove the Baathist Government and establish a Shiite Government in Baghdad.

Comparative Force Strength

A comparison of the relative strength of the military balance as of 1988. (3:101-103)

TABLE 1
OPPOSING FORCES
Iran-Iraq

IRAN			
GDP	1985/6:	r 15,306 bn	(\$174.46 bn)
growth	1985/6:	-1.5%	1986/7: -80%
Inflation	1986:	30%	1987: 50%
Debt	1986:	\$1.2 bn	1987: @ \$2.5 bn
Def exp	1986/7:	r 465 m	(\$5.90 bn)
	1987/8:	r 640 m	(\$8.96 bn)
Def bdgt	1988/9@:	r 580.00 bn	(\$8.69 bn)
\$1 = r	(1986/7:	78.76	(1987/8): 71.46
	(1988/9):	66.74	
r = rial			
Population: 52,800,000+			
	13-17	18-22	23-32
Men	2,749,000	2,329,000	3,679,000
Women	2,548,000	2,187,000	3,457,000

TOTAL ARMED FORCES

ACTIVE: 604,500.

Terms of service: 24-30 months.

RESERVES: Army: 350,000, ex-service volunteers.

ARMY: 305,000 (perhaps 250,000 conscripts).

@ 3 Army HQ.

4 mech div (each 3 bde: 9 armd, 18 mech bn).

6 inf div.

1 AB bde.

1 Special Forces div (4 bde).

Some indep armd, inf bde (incl 'coastal force').

12 SAM bn with Improved HAWK.

Ground Forces Air Support units.

RESERVE: 'Qods' bns (ex-service).

EQUIPMENT:

MBT: perhaps 1,000: T-54/-55, 260 Ch T-59, 150 T-62, some T-72, 60+ Chieftain Mk 3/5, 100+ M-47/-48, 200 M-60A1.

LIGHT TANKS: 40 Scorpion.

RECCE: 130 EE-9 Casavel.

MICV: 100+ BMP-1.

APC: 150 BTR-50, 80 BTR-60, perhaps 80 M-113.

TOWED ARTY: 105mm: M-101, 36 Oto Melara: 130mm: 125

M-46/Type-59; 155mm: 50 M-71. GHN-45, G-5 reported.

SP ARTY: 155mm: M-109A1; 175mm: 30 M-107: 203mm: 10 M-110.

MRL: 107mm: Ch Type-63: 122mm: 65 BM-21: 122mm: BM-11.

SSM: Scud: local manufacture msl reported incl Oghab 40-km range (FROG-type).

MORTARS: 107mm: M-30 4.2-in.; 120mm: 3,000.

ATGW: ENTAC, SS-11/-12, M-47 Dragon, TOW.

RCL: 57mm; 75mm; 106mm: M-40A/C.

AD GUNS: 1,500: 23mm: ZU-23 towed, ZSU-23-4 SP; 35mm: 92; 37mm; 57mm: ZSU-57-2 SP.

SAM: Improved HAWK. SA-7, some 300 RBS-70.

LIGHT AIRCRAFT: incl 40+ Cessna (185, 310, O-2A), 1 F-27, 5 Shrike Commander, 2 Mystere-Falcon.

HELICOPTERS: (attack): AH-1 Cobra; (hy tpt): CH-47C Chinook. (270 Bell 214A, 35 AB-205A, 15 AB-206 were also held.)

REVOLUTIONARY GUARD CORPS

(Pasdaran Inqilab):

GROUND FORCES: some 250,000; 11 Regional Commands: loosely org in bn of no fixed size, grouped into perhaps 30 div and many indep bde, incl inf, armd, para, special forces, arty incl SSM, engr, AD and border defence units, serve indep or with Army; small arms, spt weapons from Army; controls Basij (see Para-military) when mobilized.

NAVAL FORCES: strength unknown, five island bases (Al Farsiya, Halul (oil platform), Sirri, Bu Musa, Larak); some 40 Swedish Boghammar Marin boats armed with ATGW, RCL, machine guns.

Italian SSM reported. Controls coast defence elms incl arty and CSS-N-2(HY-2) Silkworm SSM in at least 3 sites, each 3-6 msl.

MARINES: 3 bde reported.

AIR FORCES: forming; to have AD role in static defence of major installations. May have Ch J-7 (AD), J-6 (FGA).

NAVY: 14,500, incl naval air and marines.

BASES: Bandar Abbas (HQ), Bushehr, Kharg, Bandar-e-Anzelli, Bandar-e-Khomeini, Chah Bahar (building).

PRINCIPAL SURFACE COMBATANTS: 8:

DESTROYERS: 3:

1 Damavand (UK Battle) with 2 x 4 SM-1 (boxed)

SSM, 2 x 2 115mm guns; plus 1 x 3 AS mor.

2 Babr (US Sumner) with 4 x 2 SM-1 2 x 4 SSM

(boxed). 2 x 2 127mm guns; plus 2 x 3 ASTT.

FRIGATES: 5:

3 Alvand (UK Vosper Mk 5) with 1 x 5 Sea Killer SSM, 1 x 3 AS mor, 1 x 115mm gun.

2 Bayandor (US PF-103) (probably non-operational).

PATROL AND COASTAL COMBATANTS: 34:

MISSILE CRAFT: 10 Kaman (Fr Combattante II) PFM fitted for Harpoon SSM.

PATROL INSHORE: 24:

3 Kaivan, 3 Parvin PCI, 3 Ch Chaho PFI, plus some 15 hovercraft (about half serviceable).

MINE WARFARE: 3:

2 Shahrokh MSC, 1 Harischi MSI.

AMPHIBIOUS: 7:

4 Hengam LST, capacity 9 tk, 225 tps.

3 Iran Asir (Korean) LST, capacity 600 tonnes.

Plus craft: 3 Iran Hormuz LCT.

SUPPORT AND MISCELLANEOUS: 8:

1 Kharg AOR, 2 Bandar Abbas AOR, 1 repair, 2 water tankers, 2 accommodation vessels.

Continued serviceability of combatant units doubtful.

MARINES: 3 BN.

NAVAL AIR: 1 cbt ac, 14 armed hel.

* MR: 1 sqn with 5 P-3F Orion (may not be operational).

* ASW: 1 hel sqn with 3 SH-3D, 7 AB-212 ASW.

MCM: 1 hel sqn with 2 RH-53D.

TRANSPORT: 1 sqn with 4 Shrike Commander, 4 F-27, 1

Mystere-Falcon 20 ac; AB-205, AB-206 hel.

AIR FORCE: 35,000;

Some 50 serviceable cbt ac (est numbers shown in parentheses)
no armed hel.

FGA: 8 sqn:

4 with some 35 (20) F-4D/E; 4 with some 45 (20) F-5E/F.

*may have combined.

FIGHTERS: 1 sqn with (● 10) F-14.

RECCE: 1 sqn (det) with some 5 F-5, 3 RF-4E.

TANKER/TRANSPORT: 1 sqn with 10 Boeing 707.

TRANSPORT: 5 sqn: 7 Boeing 747F, ● 12 C-130E/H, 9 F-27, 3 Aero
Commander 690, 3 Falcon 20.

HELICOPTERS: 10 HH-34F (S-55), 10 AB-206A, 5 AB-212, 39 Bell
214C, 10 CH-47, 2 S-61A.

TRAINING: incl 26 F-33A/C Bonanza, 7 T-33, 46 PC-7.

SAM: 5 sqn with Rapier, 25 Tigercat, CSA-1 (Ch version of
SA-2).

AAM: AIM-54 Phoenix, AIM-9 Sidewinder, AIM-7 Sparrow.

ASM: AS-12, Maverick. (3:100-102)

IRAQ

GDP* 1985: D 14,550 bn (\$46,800 bn)
 1986: D 11.350 bn (\$36.507 bn)
 growth 1986: -22% 1987: n.a
 Inflation 1986: 28% 1987: 17%
 Debt 1986@: \$75.0 bn 1987@: \$75.0 bn
 Def exp 1986: D 3.60 bn (11.579 bn)
 1987@: D 4.35 bn (\$13.99 bn)
 \$1 = D (1986/7/8): 0.3109
 D = dinar

Population:	16,278,000		
	13-17	18-22	23-32
Men	864,000	553,000	1,038,000
Women	777,000	563,000	929,000

TOTAL ARMED FORCES

ACTIVE: 1,000,000.

 Terms of service: basic 21-24 months, extended for war.

RESERVES: Peoples Army (Para-military) @ 650,000

ARMY: 955,000 (incl perhaps 480,000 active reserves).

7 corps HQ.

7 armd/mech div.

39 inf div (incl Peoples Army/volunteer inf and Reserve bde).

4 Presidential Guard Force div (3 armd, 1 inf, 1 cdo bde).

20+ special forces bde.

EQUIPMENT:

MBT: some 4,500: T-54/-55/-62/-72. 1,500 T-59/-69 II, 150 Chieftain Mk 3/5, M-60, M-47, 60 M-77.

LIGHT TANKS: 100 PT-76.

RECCE: incl BRDM-2, FUG-70, ERC-90, MOWAG Roland, EE-9

Cascavel, EE-3 Jararaca.

MICV: 1,000 BMP.

APC: BTR-50/-60/-152, OT-62/-64, VC-TH (HOT ATGW), M-113A1,

Panhard M-3, EE-11 Urutu.

TOWED ARTY: some 3,000: 105mm: M-56 pack; 122mm: D-74, D-30,

M-1938; 130mm: M-46, Type 59-1; 152mm: M-1937, M-1943;

155mm: 100 G-5, 200 GHN-45, M-114.

SP ARTY: 122mm: 2S1; 152mm: 2S3; 155mm: M-109, 85 AUF-1

(GCT).

MRL: 200: incl 122mm: BM-21: 127mm: 60 ASTROS II; 132mm:

BM-13/-16: 180mm: ASTROS SS-40; 300mm: ASTROS SS-60.

SSM (launchers): 30 FROG-7; 20 Scud B; Husayn (possibly mod

Scud B).

MORTARS: 120mm, 160mm.

ATGW: AT-3 Sagger (incl BRDM-2). AT-4 Spigot reported, SS-11, Milan, HOT.

RCL: 73mm: SPG-9; 82mm: B-10: 107mm.

ATK GUNS: 85mm; 100mm towed: 105mm: 100 JPz SK-105 SP.

HELICOPTERS: 150 armed hel.

ATTACK: 40 Mil Mi-24 Hind with AT-2 Swatter; 50 SA-342 Gazelle (some with HOT); 10 SA-321 Super Frelon, some with Exocet ASM; some 30 SA-316B with AS-12 ASM; some 56 BO-105 with AS-11 ATGW; 86 Hughes (26 -530F, 30 -500D, 30 -300C).

TRANSPORT: (hy): 10 Mi-6 Hook; (med): 100 Mi-8, 20 Mi-4, 10 SA-330 Puma.

AD GUNS: 4,000: 23mm: ZSU-23-4 SP; 37mm: M-1939 and twin; 57mm: incl ZSU-57-2 SP; 85mm; 100mm; 130mm.

SAM: 120 SA-2, 150 SA-3, SA-6, SA-7, SA-9, SA-14.
60 Roland.

NAVY: 5,000.

BASES: Basra, Umm Qasr.

FRIGATES: 5:

4 Hittin (It Lupo) with 1 AB-212 hel (ASW), 2 x 3 ASTT; plus 8 x Otomat SSM, 1 x 127mm gun.

1 Khaldoum (trg) with 2 x ASTT.

PATROL AND COASTAL COMBATANTS: 38:

CORVETTES: 4:

2 Hussa el Hussair (It Assad, hel version) 1 x AB-212 hel, 2 x Otomat SSM.

2 Hussa el Hussair (It Assad) with 6 x Otomat, 2 x 3 ASTT.

MISSILE CRAFT: 8 Nisan 7 (Sov Dsa) with 4 x SS-N-2 Styx SSM.

TORPEDO CRAFT: 6 Sov P-6< with 2 x 533mm TT.

PATROL, INSHORE: 20:

3 SO-1, 4 NYRYAT II, 13<.

MINE WARFARE: 8:

MCM: 2 Sov T-43 MSC, 6 MSI<.

AMPHIBIOUS: 6:

3 Al Zahraa LST, capacity 250 tps about 16 tk.

3 Sov Polnocny LSM, capacity 6 tk.

SUPPORT AND MISCELLANEOUS: 3:

1 Agnadeen (It Stromboli) AOR, 2 Presidential yachts.

DEPLOYMENT:

4 Hittin FF, 4 Hussa el Hussair corvettes and AOR Agnadeen completed and remain in Mediterranean awaiting delivery.

(Work on last two Hussair corvettes suspended before completion.)

AIR FORCE: 40,000 incl 10,000 AD personnel; some 500 cbt ac. no armed hel.

BOMBERS: 2 sqn:

1 with 8 Tu-22; 1 WITH 8 Tu-16, 4 Ch H-6D.

FGA: 13 sqn:

4 with 70 MiG-23BN:

4 with 64 Mirage F-1EQ5/EQ5-200 (EQ5 with Exocet; -200 with in-flight refueling):

3 with Su-7/-20.

2 with 30 Su-25.

FIGHTERS: @ 16 sqn with some 10 MiG-25, some 40 Ch J-6, some
150 MiG-21/Ch J-7, 30 Mirage F-1EQ, 25 MiG-29.

RECCE: 1 sqn with 5 MiG-25.

TRANSPORT: 2 sqn:

10 An-2; 10 An-12, 6 An-24 (retiring); 2 An-26, 19 II-76, 19
II-14, 1 DH Heron.

TRAINING: incl MiG 15/-17/-21/-23U, Su-7U, Hunter T-69; 16
Mirage F-1BQ: 50 L-29, 40 L-39, 50 PC-7, 21 EMB-312.

AAM: R-530, R-550 Magic, AA-2/-6/-7/-8.

ASM: AS-30 Laser, Armat, Exocet AM-39, AS-4 Kitchen, AS-5
Kelt. (3:102-103)

CHAPTER III

PHASES OF THE WAR

Phase 1: The Iraq Offensive

22 September 1980 - November 1980

The initial Iraqi assault began on 22 September 1980. That day, the Iraqi Air Force directed a concentrated air attack against economic installations, populated areas, and military targets within Iran. Also the Iraqi land forces penetrated the Iranian border and pushed 50 miles into Iran within a few days.^(1:22) Iraq also attempted to gain total air superiority by defeating the Iranian Air Force on the ground. The attempt failed due to poor tactics, ineffectively protected by reinforced concrete shelters. The bombed runways were repaired within hours, and Iran was able to fly limited counter attack sorties by the second day of the war. Nevertheless, within a week, 30,000 Iraq soldiers were in Iran's Khuzestan Province, and near their major objectives of Khorramshar and Abadan. In the face of rapidly building Iranian resistance, Iraq finally took Khorramshar, but could not take Abadan. Iraq's inability to capture Abadan was one of the main factors that changed the course of the war to the benefit of Iran. During this time, Iraqi forces succeeded in dominating a strip 800 km long and 20-60 km in depth, that extended from Khorramshar in the south to Kasr Sherin in the north.^(1:22)

Phase 2: Stalemate

17 November 1980 - 26 September 1981

The war slowed down because both sides wanted to conserve war supplies. Since both countries lacked domestic military industry, they had to rely on third-country support for military supplies.

While both sides participated in a prolonged artillery duel, Iran established a defensive line and rebuilt its arsenal. Iran exploited this lull with a concentrated effort to reorganize its Armed Forces and to move into a full-war status. Iranian forces along the front were repositioned and the necessary maneuvers to different sectors were carried out. Release of many military leaders from jail allowed the Army to exploit their expertise in military operations. Volunteers were allowed to join the Revolutionary Guard and widespread preparations for operations to regain the occupied territories was begun.

Phase 3: Iranian Counter Offensive

27 September 1981 - October 1983

During this phase, Iran regained the initiative and began a series of counter attacks in the southern sector. They raised the siege of Abadan and forced the Iraqi forces to withdraw towards Khorramshar. During the offensive, the Iranians used human wave attacks, including old men and boys, against Iraqi defensive positions. Iraq had to withdraw the main concentration to the rear, concentrating their defenses on

vital lines. The Iranian forces applied initiative, concentration of forces, and surprise and maneuver tactics with good affects. Frequent night operations contributed to some extent to Iranian success. (1:25)

A succession of Iranian counter attacks began during this phase with various religious related names. The operations were called "Fatma-Al-Zahraa", "Fateh Bit-Al-Makdes" or Operation "Jerusalem."

Phase 4: The Stalemate

October 1983 - August 1988

Towards the end of 1982, the Iranians drove the Iraqis back behind their border. Iraq's military situation was desperate and was forced into a "hold-at-all-costs" policy of static defense. (5:955)

Most Iranian operations, particularly in the southern sector, are characterized by a "GO PUSH" strategy. Iran's stunning capture of the Fao Peninsula, in February 1986, was a notable military success when amphibious forces landed behind the Iraqi river-line defenses. The Iranians took Iraq's main naval base at Al-Fao and threatened the whole area south of Basra. After the Iranians used the Silkworm missile on the Peninsula, they then threatened Kuwait's Mina Al-Ahmadi Port by attacking a number of oil tankers--in the port and in transit to the port.

In April 1988, the Iraqi regained Al-Fao Peninsula with a well-planned surprise attack and drove the Iranians back to their 1986 positions behind the Shatt Al-Arab. The Fao operation, along with other operations against outposts of Iranian forces along the central and north front, demonstrated a new Iraq initiative to shift to offensive warfare which continued until the cease fire agreement in August 1988.

CHAPTER IV
CONDUCT OF THE WAR

The War at Sea

The war at sea began simultaneously with the land war with a naval engagement fought by patrol boats of both navies. From September to November 1980, Iranian vessels attacked Basra, and two oil terminals in Al-Fao and at the port of Al-Bakr, both navies retired after the brief engagements.^(7:18) Iranian warships then withdrew all the way south to Bander-Abbas Naval Base where they remained until 14 April 1988 when the US Navy, in retaliation for Iran's mining activities, destroyed six Iranian vessels.^(5:950)

The Tanker War

In the early 1980s, both Iran and Iraq attacked commercial vessels in the Arabian Gulf. But in 1984, Iraq very sharply increased attacks against oil tankers in an effort to bring the war to an early end by striking Iran's oil terminal and shipping in hopes of drawing-down Iran's cash reserves available for fighting the war. Subsequently, hundreds of commercial vessels from more than 30 countries were damaged as a result of the so-called "Tanker War." Between May 1981 and October 1987, 395 attacks were conducted against merchant vessels; most of these attacks took place after acceleration of the "Tanker War." Acceleration of the "Tanker War" stemmed from Iraq's diminishing chance of victory and the need to disrupt

the war economy of her enemy with systematic attacks upon Iranian oil export facilities. TABLE 2 reflects international involvement in the "Tanker War."

TABLE 2
... AND WHO'S GETTING HIT

FLAG	ATTACKED BY IRAN	ATTACKED BY IRAQ	TOTAL
Australia	0	1	1
Bahamas	1	2	3
Belgium	1	0	1
China	1	0	1
Cyprus	9	33	42
West Germany	1	4	5
France	5	0	5
India	10	22	32
Iran	4	4	8
Iran	0	48	48
Italy	1	1	2
Japan	9	0	9
Kuwait	11	0	11
Liberia	24	36	60
Malta	1	11	12
Netherlands	0	2	2
North Korea	0	1	1
Norway	4	1	5
Pakistan	2	0	2
Panama	18	28	46
Philippines	3	0	3
Qatar	2	1	3
Saudi Arabia	9	2	11
Singapore	1	5	6
South Korea	3	3	6
Spain	3	0	3
Sri Lanka	1	0	1
Turkey	2	8	10
United Arab Emirates	1	0	1
United Kingdom	5	2	7
United States	1	0	1
USSR	2	0	2
Yugoslavia	1	0	1
Unknown	2	42	44

TABLE 2(8:10)

TABLE 3
IRAN-IRAQ ATTACKS

<u>Year</u>	<u>Iran Attacks</u>	<u>Iraq Attacks</u>	<u>Total</u>
1981	0	5	5
1982	0	22	22
1983	0	16	16
1984	18	53	71
1985	14	33	47
1986	45	66	111
1987	<u>91</u>	<u>88</u>	<u>179</u>
Totals	168	283	451

TABLE 3

The Air War

At the outbreak of the war, the Iraqis' preemptive air strikes against 10 airfields in Iran caused virtually no damage since only runways were targeted. To excuse their pilots' poor training, the Iraqis claimed that much of the Soviet ordnance was faulty. Conversely, while Iran hit several Iraqi airfields, it hit with considerable effectiveness.

However, the Iranian Air Force advantages, both in its sophisticated American-built aircraft and in its pilot proficiency, were hampered by inadequate spare parts, poor

maintenance, and Iranian suspicion of some of its pilots. A number of the Iranian pilots defected with their aircraft to Iraq or to other Gulf States.

Both sides avoided conflict in the air, especially over the Gulf waters as they occasionally met at the same point in the air space, but no air-to-air engagements resulted. Neither side's air defenses was effective. The Iraqis had mostly Soviet air defense nets which were ineffective mainly because of poor Soviet training methods and unreliable equipment. Thus, the Iranians found out that they could strike virtually anywhere in Iraq by flying low-level.

The Iranians also used tactics such as those developed by the United States in Vietnam to evade the Soviet Surface-to-Air Missiles (SAMs). The Iranian air defense was largely ineffective mainly due to poor maintenance or the lack of spare parts for their HAWK missiles. Additionally, many aircraft from both sides were lost to friendly fire due to poor air defense integration systems. Close air support was very limited on both sides. Helicopter gunships were used with some success against tanks, but neither side had enough helicopters for large scale operations.

Shift in Iraq Air Capabilities

When the Iraqis decided to interdict the Iranians' oil shipping in the Gulf in 1983, Iraq had to lease five Super-Entendard fighters with EXOCET missiles from France. Previously Iraq had been bombing shipping in the Gulf waters

since May 1981, but these sorties were ineffective. Iraqi success increased when they acquired the Super-Entendards, and later with the acquisition of Mirage F-1 fighters with their air-to-air refueling capability. Both greatly improved the Iraqis' effectiveness and long-range strike capability.

Interestingly, the Iraqi Air Force's French training seems to have improved its performance enormously as rigid Soviet-style tactics were abandoned. Pilot initiative was encouraged and targets of opportunity were aggressively attacked. It was ironic that the Iraqi Air Force improved its operations by abandoning the Soviet doctrine even while using Soviet aircraft. (5:957)

The early part of 1985 saw a more confident Iraq Air Force making as many as 300 daily sorties. Iraqis began pounding Iranian economic targets on Kharg Island, Sirri Island, Bander Khomeni Seaport, and oil refineries all over Iran. The Iraqis also shocked Iran and many military observers when they planned and executed attacks that involved 1,000-mile round trips by Mirage F-1s using body-to-body air refueling tactics on targets close by Larak Island in the mouth of the Strait of Hormuz. (Refer to Map 5, p. 40.)

By the beginning of 1988, Iraqi pilots were observed employing a very well-planned and sophisticated mission. They employed decoys to deceive the Iranian air defenses and early warning, they maintained good command and control of their

aircraft over a very long distance from their home bases, and they struck targets as far as Larak Island over the Gulf waters. They also destroyed targets as far as the Caspian Sea, deep inside the Iranian mainland. While there were improvements in Iraqi tactics in the last few months before the cease fire. There were also less Iranian air activities probably due to a shortage of serviceable combat aircraft available to the Iranian Air Force at that time.

Some sources claim that Iran was down to seven F-14s (with downgraded radars), ten to fifteen F-5s, and twenty F-4s at the end of the war. Because Iran had no effective maritime aircraft, it was forced to use speedboats and Silkworm missile attacks against commercial shipping in the Gulf waters in retaliation for Iraqi air attacks.

Chemical Warfare

Iraq's use of chemical weapons was essentially defensive and was quite effective in neutralizing Iranian offensive operations. Apparently Iran also started using chemical weapons on the battle front; specifically mustard gas and phosgene. Meanwhile, with Iraq's introduction of effective mobile defensive tactics in 1984, its use of chemical weapons steadily declined. (5:956)

War of the Cities

In 1985, Iran acquired Soviet-made SCUD-A and B surface-to-surface missiles with maximum ranges of 90 and 175 miles respectively. These missiles were able to hit Baghdad

from Iranian positions some 80 miles distant. Iraq was unable to retaliate with its own SCUDs because Tehran is 320 miles from the border. In 1987, Iraq struck back against Tehran with nearly 150 missiles, after Iraq either by its own effort or after seeking outside help, extended the SCUD-B missile range by adding a booster stage. Meanwhile it is accurate to say that the greatest damage the Iraq Air Force inflicted on Iran was as the result of attacks of economic targets, not the surface-to-surface missile attacks on the Iranian cities.

CHAPTER V

ANALYSIS OF THE WAR

Objectives and Strategy

1. The Iraqis' unlimited political objectives put a huge demand on its military strategy and its Armed Forces that were difficult to satisfy. The territorial objectives of securing the Shatt Al-Arab waterway and occupying Kermanshah Province were straight-forward military missions that required only the occupation of these territories. Less limited and more difficult were the further political objectives of overthrowing Khomeini and establishing Iraq's stronger role in the Arabian Gulf. These goals require nothing less than the decisive defeat of the Iranian Army and Navy. Iraq's security policy of keeping the Iraqis' casualties to a minimum was also less compatible with the strategic and political objectives.

In all respects, the Iraqis' initial war strategy was limited. On the other hand, Iran's initial war strategy was for general war. For its part, Iran's political objective was straight-forward and clear and that is the survival of the so-called Islamic Revolution. Noticeably, Iran was also quick to carry the war to Iraqi territory through air and naval raids on strategic targets with 24 hours of the outbreak of the war. (7:23-24)

2. Iraq wins early battle - but strategic decision may lead to loss for war:

Instead of allowing his forces to advance until their momentum was exhausted, Saddam Hussein ordered them to halt while they were still moving steadily forward. This decision saved Iran's Army from major defeat and gave it time to regroup, and this decision led to a complete turnaround in the course of the war. The Iraqi forces conquered the border but never concentrated forces on the most critical front.

Forces were diverted to Abadan when they should have been attacking Ahvaz and the air base at Dezful, where the Iranian forces were. This strategy violated a considered must of combat, concentrate on defeating the enemy's military forces. (6:51-52)

3. Both sides performed poorly during the initial stages of the war:

The sophisticated weaponry possessed by both sides was not used as intended due to lack of technical expertise, as well as a lack of training and understanding. Problems were encountered by using tanks to attack built-up areas without infantry support and many tanks were abandoned on the battlefield because of inability to resupply. (6:58-59)

Both sides showed an inability to use combined arms effectively. Logistics also caused the combat arms to suffer. Lines of communication were long and subject to interdiction by

air and ground forces, and several offenses by Iran failed because of lack of logistical support.

4. Air power is insignificant:

In general, the air forces were not a significant factor in this war, although there was noticeable improvement in the Iraqi Air Force tactics at the latter part of the war. Possessing the most advanced war equipment is totally ineffective if employed without a coherent strategic concept and supporting operational plan.

Iraq's initial plan was apparently to destroy the Iranian Air Forces on the ground. This plan reflected outdated operational thinking and lack of adequate field intelligence because Iran, like many other countries in the area, had learned well the lesson and the value of airfield shelters after the destruction of the Egyptian Air Force on the ground in the 1967 war. The Iraqis did not calculate accurately the number of sorties required to ensure airfield destruction and the pilots' accuracy was inadequate. The result was an ineffective attack which did not affect Iran's air power as was intended.

Iran on the other hand, was lacking an overall concept for its countervalue strategy which determined its target selection. Iran's aggressive start was short-lived. It was reported that within a month after the start of the war, Iran lost 90 out of 200 operational combat aircraft due to Iraqi air defences and some due to friendly defenses, and its air activity became restricted due to manpower and material shortages.

Both countries employed their strike aircraft in isolated raids rather than as integrated raids and there were a few cases of massing strikes with limited success. Bombing was routinely conducted from high altitude in order to avoid ground defenses, with little damage to military and economic targets. For example, Iraqi air strikes against Iran's Kharg Island oil terminal continued from 1982 until just before the end of the war, but failed to put this large and complex facility out of action.

5. Strategic bombing ineffective:

Both countries improved in target selection throughout the war. Both nations tried to break the will of the other to fight by firing long-range surface-to-surface missiles mostly after midnight against populated areas in Tehran and Baghdad. But from a military point of view, the values of the attacks on the population center, the "war of the cities" had been virtually nil. (5:958)

6. Close air support ineffective--except for helicopters:

Both sides used their attack helicopters with some success. Iran first employed its Cobras to delay the Iraqi advance. And the Iraqi used its attack helicopter quite effectively to weaken the Iranians' thrust to advance inside the Iraqis' borders at the latter parts of the war.

7. Air defenses ineffective:

Neither side was able to use its air defenses weapons successfully. This was probably because of faulty maintenance

and lack of training. Iraq's ZSU-23-4s did not use radar to track targets. Instead, fire was massed at a point in the air in hopes that a plane would fly into it.^(6:45) Both sides started the war with good air defense systems at least on paper, but both failed to integrate their air defense elements into an overall system, thus allowing the opposition to penetrate almost unhindered. Iraq was forced to pull back some of its SA-6 brigades from its ground forces in Iran and redeploy them to defend strategic targets, since SA-2 and SA-3 were not effective against the Iranian pilots.

Both countries' employment of their interceptors for air defense purposes was very limited due to the downing of so many interceptors because of friendly air defenses.

During later stages of the war, Iran acquired improved SAM defenses and succeeded in downing 2 to 3 high altitude reconnaissance aircraft (MiG-25).

7. Although armed with modern, sophisticated weapons, either side used them effectively.

8. Neither side demonstrated a capability for conducting sustained air operations in support of clear cut objectives with the exception to the Iraqis' Air Force campaign to cripple Iran's economic ability to keep fighting.

9. Lack of real-time intelligence resulted in lost opportunities to destroy vulnerable targets on the battlefield.

10. Neither side showed a capability for conducting effective joint operations:

The exception to that was the Iranian occupation of Al-Fao Peninsula in 1986 where the operation was conducted by a combined force of regular army, revolutionary guard and naval forces which trained for this operation for over a year. The Iraqis also retook the same peninsula in 1988 with a coordinated combined force.

11. Iraqi flexible, mobile defense is effective strategy:

This Iraqi strategy assumed that, with a numerical superiority and the option of selecting the time and place to attack, the Iranians would usually break through Iraq's forward defenses. The mobile defense strategy called for the less-mobile units to hold the line and channel the Iranian breakthrough, while mobile units moved into place to destroy the attackers. (5:956)

12. The reliance on external suppliers for weapons made the war outcome subject to the mercy of other nations.

13. Nations can be expected to use prohibited weapons such as chemical or nuclear weapons, if available to avoid total defeat. Iraq's use of chemical weapons was essentially defensive, i.e., they were primarily employed to disrupt Iranian offensive and not to launch Iraqi offenses.

Conclusion

The Iran-Iraq War caused grave economic deterioration, loss of many lives, and wholesale attrition of abilities and capabilities in the area. The conflict which was envisioned as a short, limited, local war; did not achieve its objectives of

imposing Iraq's will over Iran. The Iraqi offensive against Iran's mainland, united the Iranian people in support of their Armed Forces.

On both sides, the art of strategy, objectives, and operation were not always applied properly. Instead, changing strategy, random objectives, and inaccurate forward planning were the norm. The war results were disastrous to both countries militarily, politically, economically, and socially, and the war's adverse effect will remain for years to come, overshadowing the whole area.

Needless to say, it would be unwise to speculate that the cease fire will hold indefinitely, particularly considering the two countries' deep, historical, and ideological differences. However, several lessons may be drawn from the assessment of the Iran-Iraq War:

1. Once there is no alternative of using force to achieve political objectives, nations must consider how they intend to end the war.
2. The objective should be obtainable. And the military and political strategy should be suitable.
3. The strategic plan must be flexible to accommodate any changes as the war continues.
4. Strategy must envision operation all the time.
5. Nations can have the most powerful modern weapons available to them, but still have no combat capability, if they do not

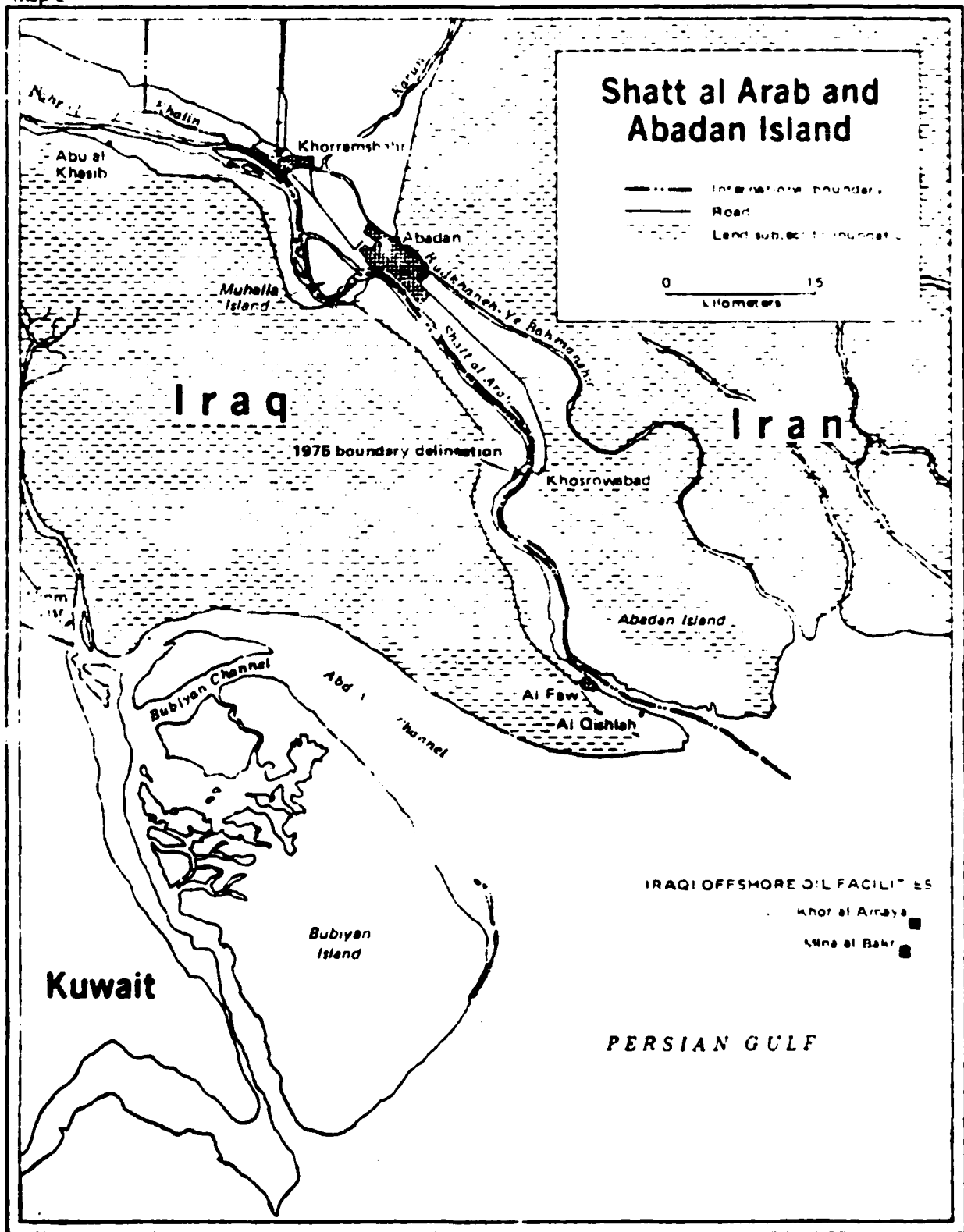
have the proper Command, Control, Communications, and Intelligence (C3I), and the proper training.

6. Military leaders and politicians must understand that the actual war is different from war on paper.

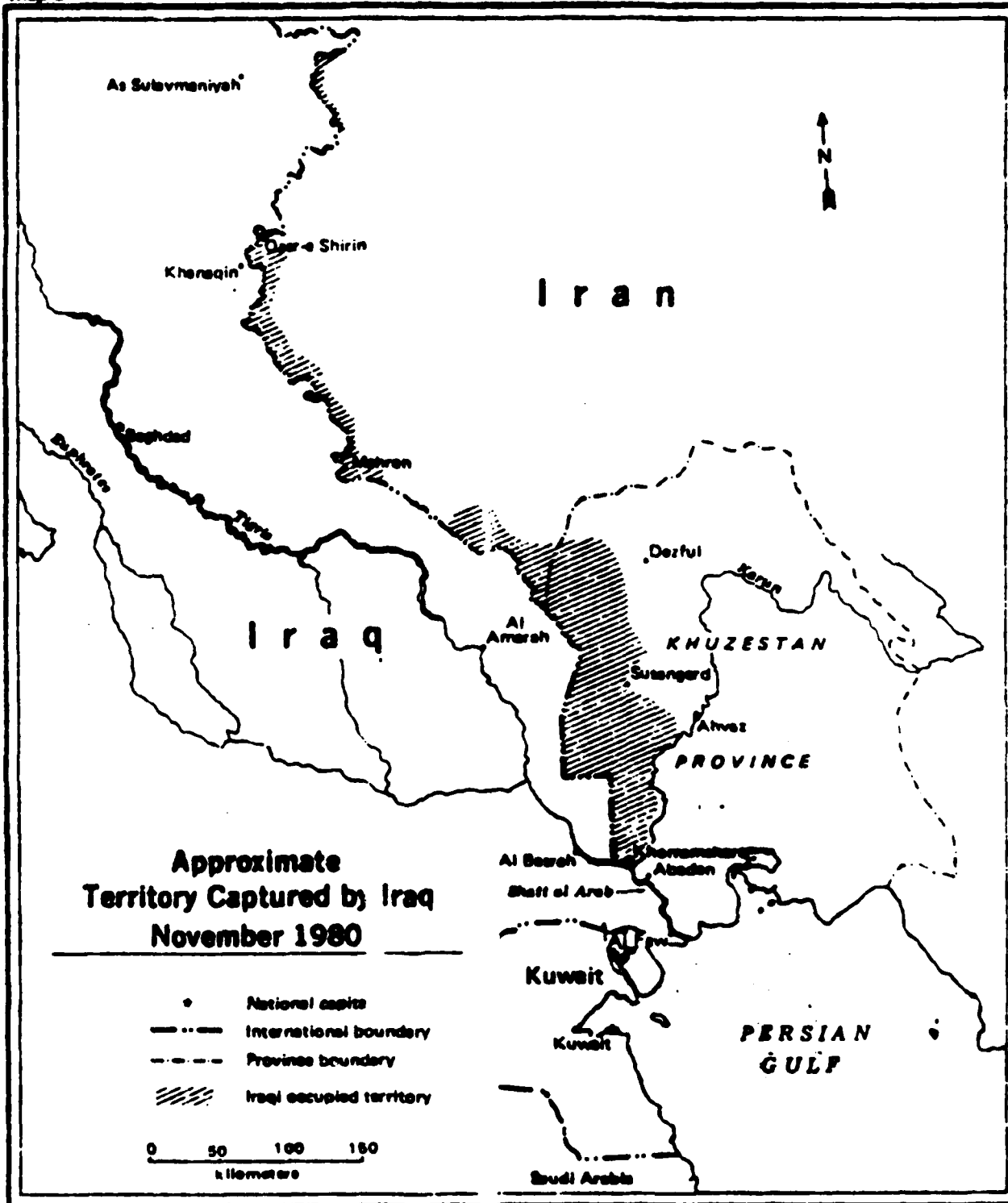
Map 1



Map 2



Map 3

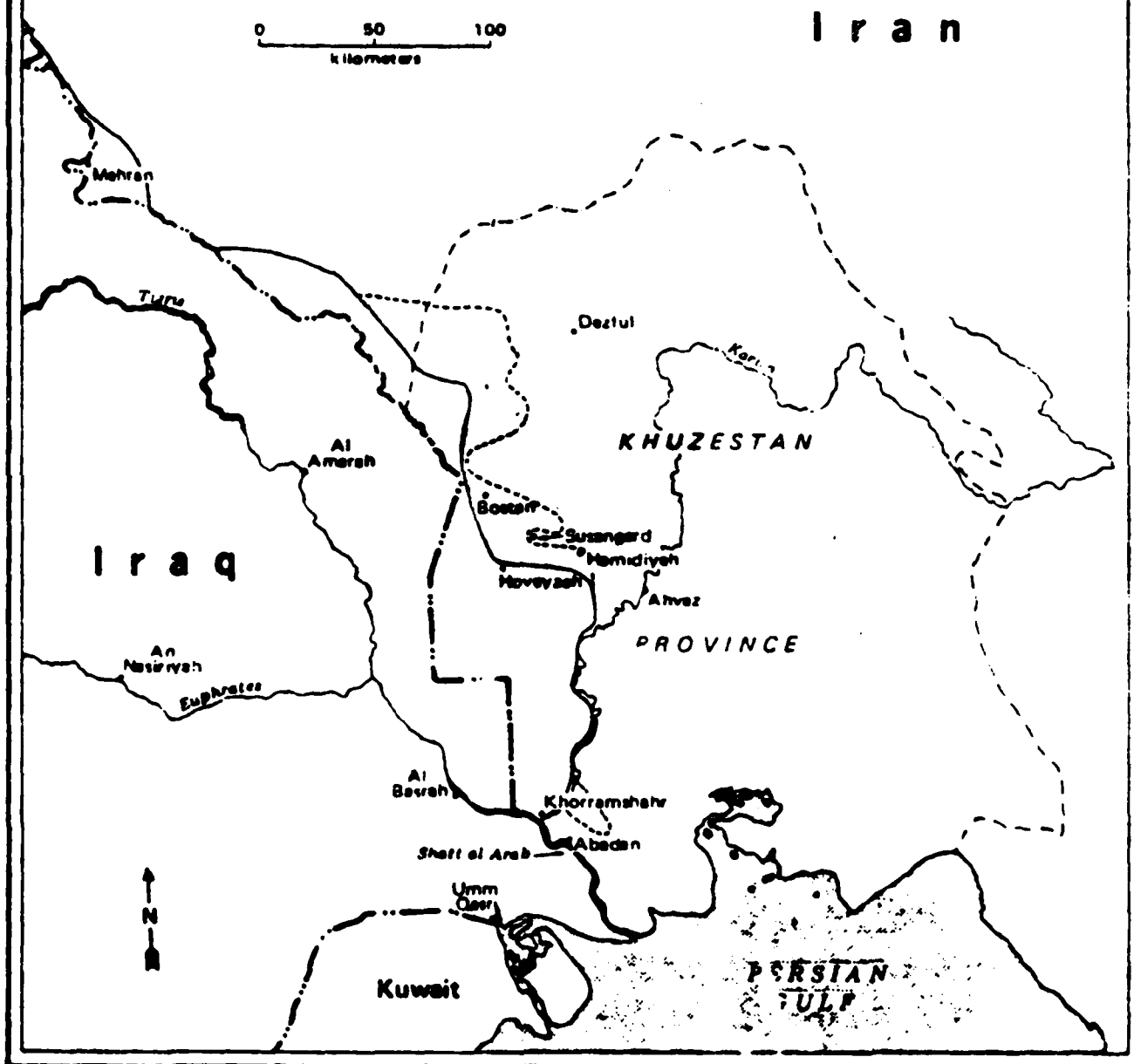


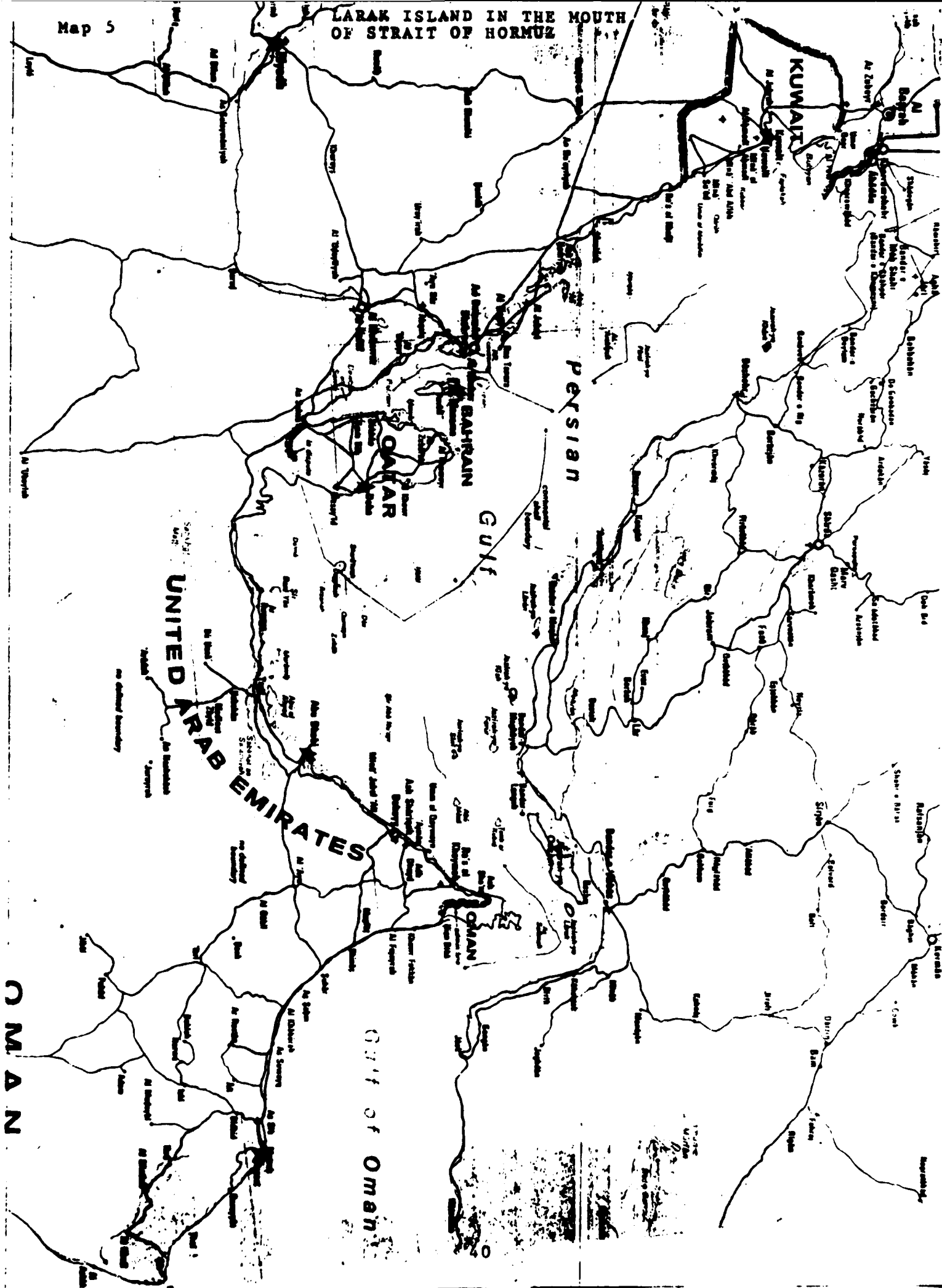
Changes in the Front Line in Khuzestan Province

- International boundary
- - - Province boundary
- Front line April 1, 1982*
- - - Front line November 1980*

* Lines are approximate.

0 50 100
kilometers





BIBLIOGRAPHY

- Abdel-Halim, Ahmed M. Five War Zones. Washington: Pergamon Brassey's, 1986, p.14.
- Hichman, William F. Ravaged and Reborn: The Iranian Army, 1982, Washington DC, The Brookings Institution, 1982, p. 3.
- International Institute for Strategic Studies. Military Balance 1988 - 1989, London, International Institute for Strategic Studies, 1988, pp. 100-103.
- Mark, Clyde R. The Persian Gulf, 1987: A Chronology of Events. CRS Report for Congress, Foreign Affairs and National Defense Division, February 10, 1988.
- Segal, David. "The Iran-Iraq War: A Military Analysis." Foreign Affairs, Vol 66, No 5, Summer 1988, pp. 950-958.
- Sonnenberg, Robert E. The Iran-Iraq War: Strategy of Stalemate. April 1985, pp. 51-52.
- Staudenmaier, William O. "A Strategic Analysis of the Gulf War. Strategic Studies Institute" (U.S. Army War College), 25 January 1982, p. 18.
- Tyler, Patrick E. and others. "The Relentless War in the Water." The Washington Post National Weekly Edition, October 26, 1987, p. 10.